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F. H. MANCHESTER.
ELECTRIC INCANDESCENT LAMP BASE.
APPLICATION FILED JAN. 31, 1907.

Fig. 1.

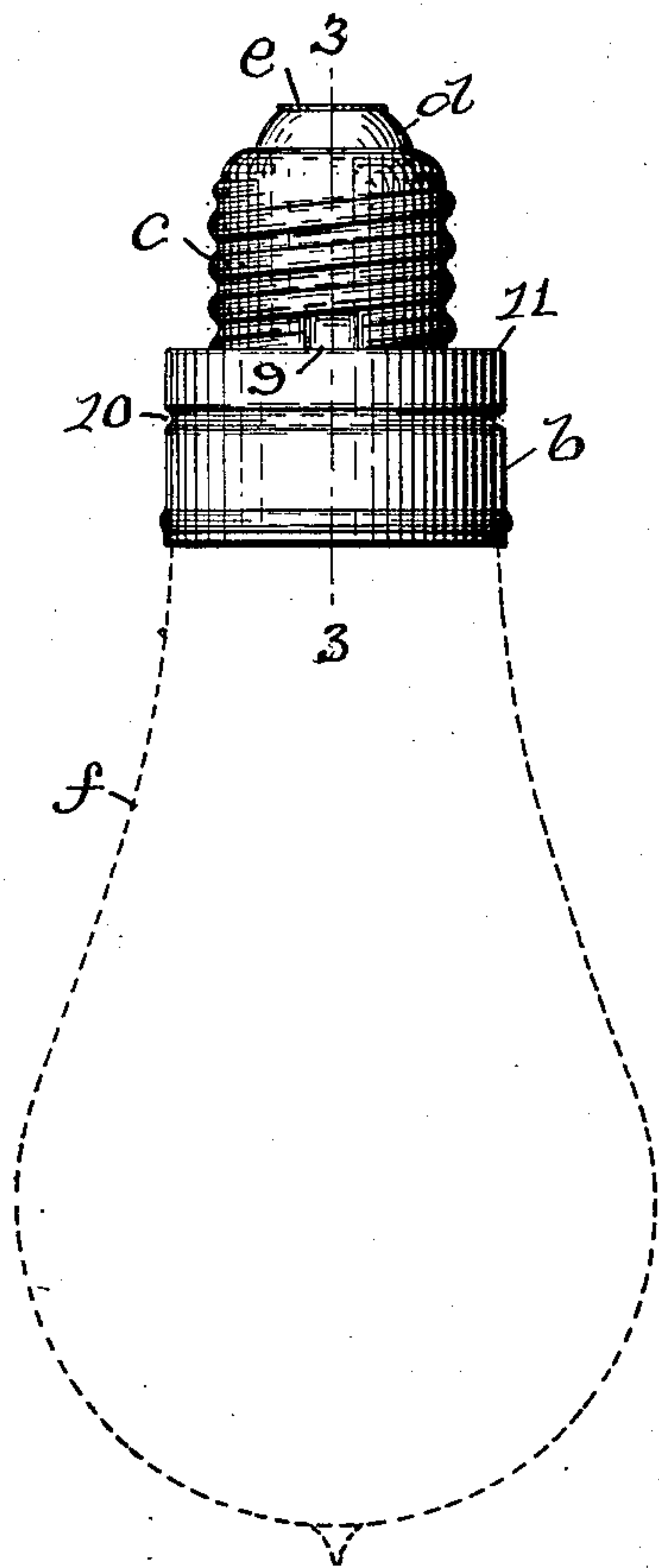


Fig. 2.

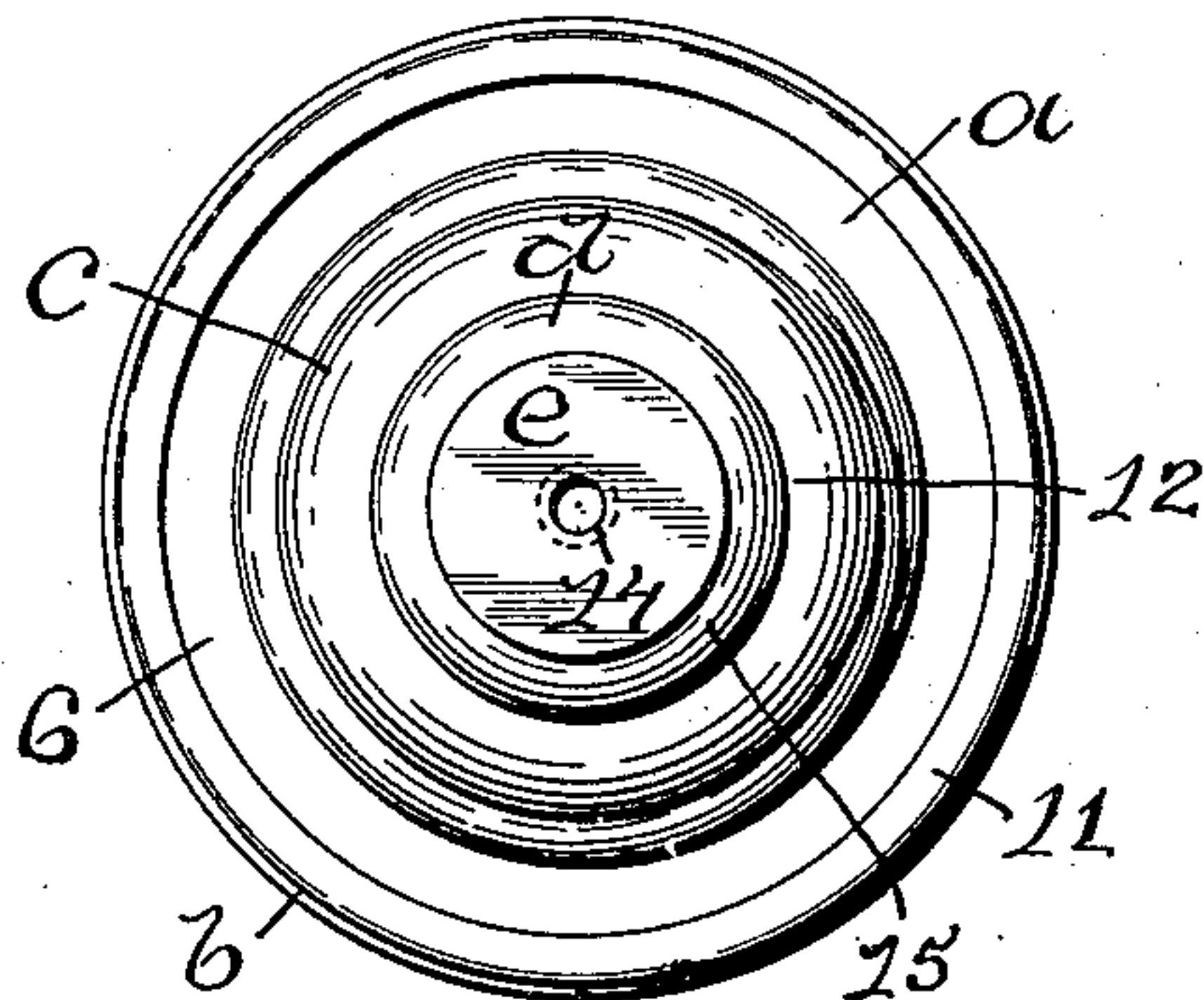


Fig. 3.

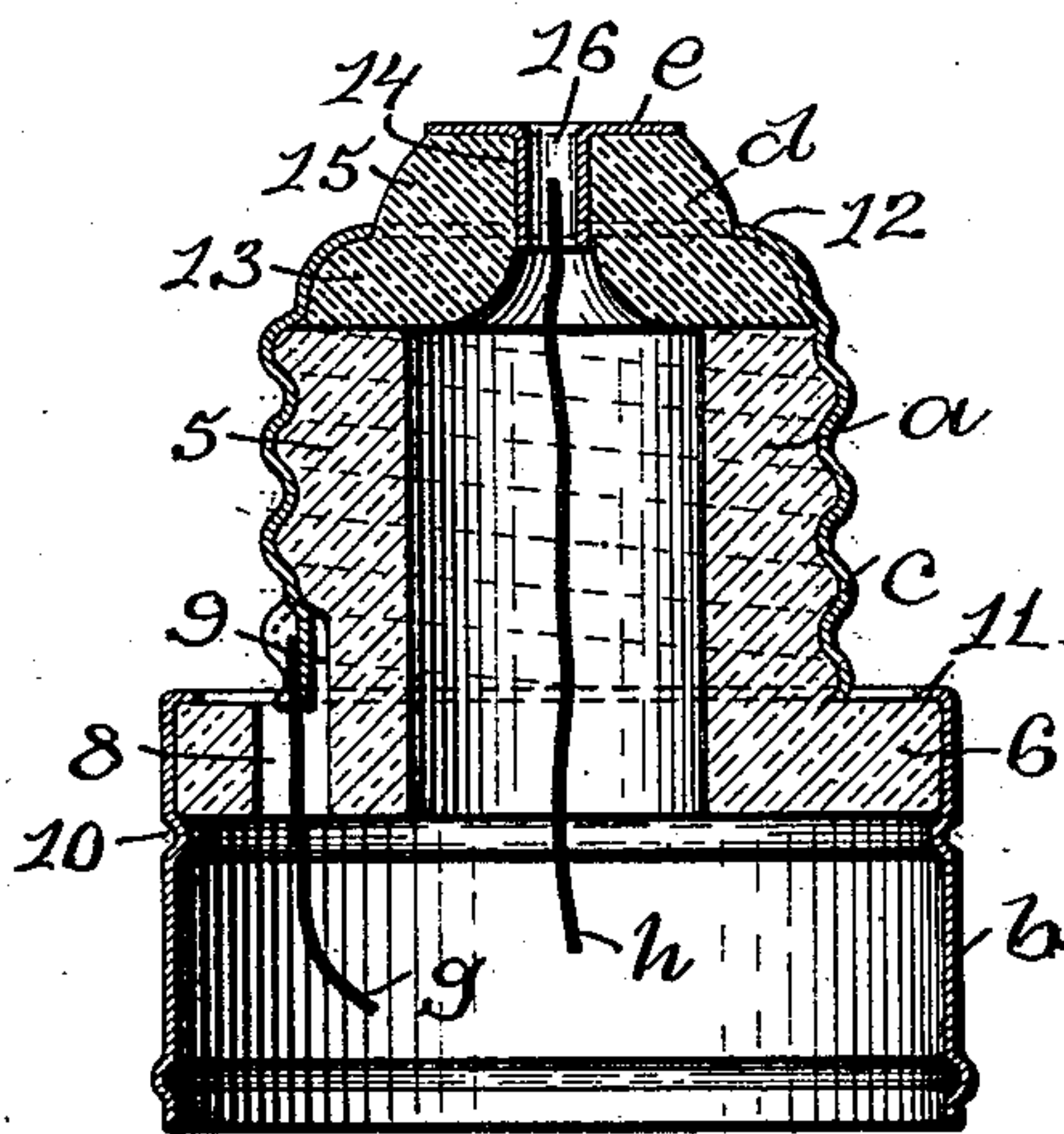
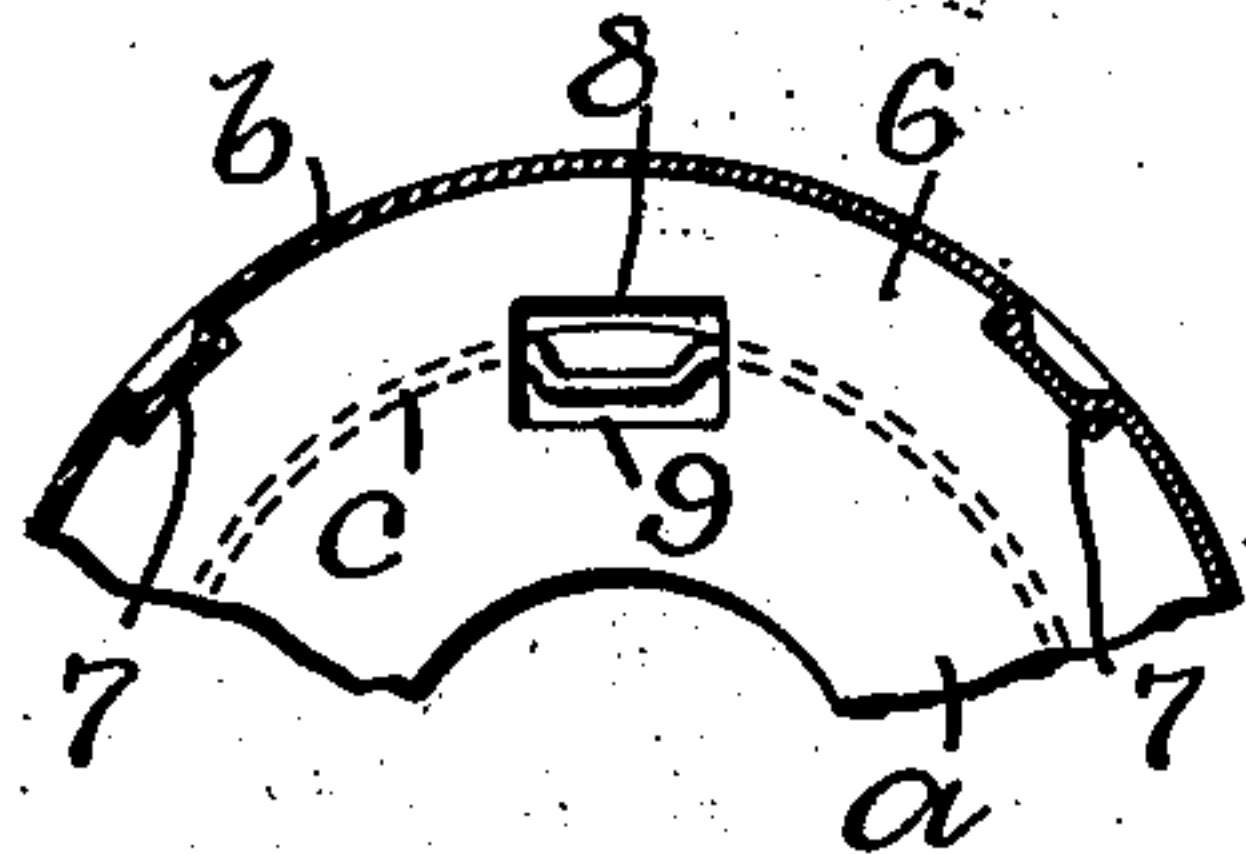


Fig. 4.



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ELECTRIC INCANDESCENT-LAMP BASE.

No. 868,283.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERIC H. MANCHESTER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Electric Incandescent-Lamp Bases, of which the following is a specification.

This invention has reference to an improvement in electric incandescent lamps and more particularly to an improvement in bases for electric incandescent lamps.

In the older or more obsolete forms of bases for electric incandescent lamps, the metal skirt or that part of the base in which the lamp is secured is formed integral with the metal screw-threaded portion or that part of the base which screws into the socket and forms one of the electrical connections of the lamp. In this construction the skirt, forming a part of one of the electrical connections, is exposed to contact by the user of the lamp turning on the lamp. If the user of the lamp should grasp the skirt of the base with the hand, or come into contact with the skirt in turning on the lamp, he would be liable to receive the full force of the current, which if not properly transformed for these lamps would cause great injury or death to the user.

The object of my invention is to improve the construction of electric incandescent lamp bases, whereby the skirt or that part of the base in which the lamp is secured is electrically insulated from the screw-threaded portion of the base, or that part of the base which screws into the socket, and forms one of the electrical connections of the lamp.

My invention consists in the peculiar and novel construction of an electric incandescent lamp base whereby the metal shell of the base is formed in two parts and the skirt is electrically insulated from the screw-threaded portion with details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a vertical side view of my improved electric incandescent lamp base, showing a lamp extending downwards from the skirt of the base in broken lines. Fig. 2 is an enlarged view looking at the contact end of the base. Fig. 3 is an enlarged vertical-sectional view taken on line 3-3 of Fig. 1 through the base, and Fig. 4 is an enlarged detail transverse sectional view of part of the base, showing the means for preventing the skirt and screw-threaded shell from turning on the porcelain insulating sleeve.

In the drawings, *a* indicates the insulating porcelain sleeve, *v* the skirt, *c* the screw-threaded contact shell, *d* the glass insulating cap, *e* the contact plate of my improved electric incandescent lamp base, *f* a lamp shown in broken lines in Fig. 1, and *g* and *h* wires adapted to connect the contact shell *c* and contact plate *e* with the lamp *f* in the usual way.

The insulating porcelain sleeve *a* is constructed to have the externally-screw-threaded cylindrical body

portion 5 on the lower end of which is an enlarged annular flange 6 having in its periphery a series of notches 7 7, and a rectangular hole 8 extending vertically through the flange 6 and forming a notch 9 in the side of the body portion 5, as shown in Figs. 3 and 4. The body portion 5 of the insulating sleeve *a* may be constructed without the screw-threads and the screw-threaded contact shell *c* secured to the same by cement or other means.

The skirt *v* is cylindrical in form and has the internal annular beading 10 adjacent the upper end. The annular flange 6 of the insulating sleeve *a* is secured in the upper end of the skirt *v*, intermediate the beading 10 and an annular lip 11 formed by rolling the circular end of the skirt *v* over the annular flange 6, as shown in Figs. 2 and 3. The skirt *v* is prevented from turning on the flange 6 of the insulating sleeve *a* by forcing the adjacent portions of the skirt into the notches 7 7 in the periphery of the flange 6, as shown in Fig. 4.

The screw-threaded contact shell *c* is adapted to screw onto the screw-threaded body portion 5 of the insulating sleeve *a* and has a rounded-over inwardly-turned annular lip 12 on its upper end, as shown in Fig. 3. This shell *c* is prevented from turning on the insulating sleeve *a* by forcing the adjacent portion of the shell into the notch 9, formed in the body portion 5 of the sleeve, as shown in Fig. 3.

The insulating cap *d* is formed to have an annular flange 13 shaped to fit under the annular lip 12 on the contact shell *c*, a central hole 14 and a circular boss 15 which extends through the open end of the shell *c* and has a flat end for the contact plate *e* which has a tubular stem 16 extending into the central hole 14 in the cap *d*, as shown in Fig. 3.

The insulating cap *d* is constructed preferably of black glass, whereby the buyer or user can easily distinguish this safe form of base from various other dangerous forms of bases or the older forms in which the insulating cap is made of white porcelain. The lamp *f* is secured in the skirt *v* in the usual way. The wire *g* from the lamp is carried through the hole 8 in the flange of the insulating sleeve *a* and secured to the bent-in portion of the shell *c* by solder and the wire *h* extends from the lamp through the sleeve *a*, the hole 14 in the cap *d* and is secured in the tubular stem 16 of the contact plate *e*, as shown in Fig. 3, by solder.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An incandescent lamp base embodying a porcelain sleeve formed with an enlarged annular flange at its base which projects outwardly from said sleeve, a glass cap formed with an enlarged annular flange at its base seating on the top of said sleeve, a contact shell secured to said sleeve and having its lower end terminating at the juncture of the sleeve and said flange thereof the upper end of said shell being turned inwardly to inclose said flange of the cap and to have its end extremities abut the sides

of said cap, and a skirt having an annular beading in engagement with the under face of the sleeve flange and having its upper end turned inwardly to lie on the upper face of said sleeve flange at points remote from the lower end of said contact shell.

2. An incandescent lamp base embodying a porcelain sleeve having an enlarged base, a glass cap having a crown and an enlarged base seating on the top of said sleeve, a contact shell secured to said sleeve and having its upper end bent inwardly to engage over said flange of the cap, and a skirt having its upper end bent into engagement with the exterior of said enlarged base of the sleeve.

3. An incandescent lamp base embodying a sleeve having an enlarged flange at its base, a cap seating on the top of said sleeve, a contact shell secured to said sleeve and having its upper end bent to engage the exterior of said cap and sustain the same in relative position to the sleeve,

and a skirt having its upper end bent to engage the periphery and the top of said flange, said bent portion of the skirt terminating at points away from the sleeve.

4. An incandescent lamp base embodying a sleeve, a cap seating on the top, of said sleeve, a contact shell secured to said sleeve and having its upper end extending thereabove to be bent to engage the exterior of said cap to secure the same to said sleeve, and a skirt having its upper end bent into engagement with said sleeve at the base thereof at points exterior of the lower termination of said contact shell.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERIC H. MANCHESTER.

Witnesses:

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